

Date: Fri, 16 Jul 93 15:39:08 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #867  
To: Info-Hams

Info-Hams Digest                      Fri, 16 Jul 93                      Volume 93 : Issue 867

Today's Topics:

    \* SpaceNews 19-Jul-93 \*  
    10 ELECTRICAL COMMANDMENTS  
        Altronics Phone?  
    ARES help in FLOOD zone???  
        CW continued.  
        CW continued [long]  
        IC-730 RF Problem  
    MPF102 direct replacement !!!!  
        People with funny ears  
            qrp...  
    SSTV video source/manipulation questions  
        Teletype question

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.  
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Date: 16 Jul 93 16:00:42 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: \* SpaceNews 19-Jul-93 \*  
To: info-hams@ucsd.edu

SB NEWS @ AMSAT \$SPC0719  
\* SpaceNews 19-Jul-93 \*

BID: \$SPC0719

=====  
SpaceNews  
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MONDAY JULY 19, 1993

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It is published every week and is made available for unlimited distribution.

\* PROJECT MOONRAY \*

=====

In only 6 years and 5 months we will be entering the 21st century. Now is the time to start thinking about formulating some interesting future plans for the continuation of Amateur Radio in Space projects. During the last few annual meetings at Project OSCAR Headquarters, a decision was made to revive Project MOONRAY as a possible original concept that might become a stepping-stone for more exotic projects throughout the 21st century. These might even include additional Lunar experiments, Space-Station, Mars, Venus, Jupiter, Asteroid, and Deep-Space Probe Amateur Packages. Although some of these plans are certainly long-term, the originators would like to leave Radio Amateurs world-wide with a legacy they started when they originated Project OSCAR in 1960.

Nick Marshall, W6OL0, dreamed up the idea of putting an Amateur Repeater on the moon in 1965 during the APOLLO manned lunar exploration program when he met Owen Garriott, W5LFL, astronaut in training, scheduled to go to the moon on forthcoming APOLLO 18, or 19, or 20. Nick used Project MOONRAY, short for "Moon Relay" as an identifier for this concept. The idea was to build a package that could fit under the seat of the Lunar Rover vehicle. Nick had contacted NASA with this concept and they agreed to accept a package that would fit a space vacated by the exchange of batteries when fuel cells would be installed in the Lunar Rover vehicle. Hopefully, Owen was to be the driver and would have been the astronaut to erect the MOONRAY package on one of the Lunar Rover's excursions. An arrangement was to be made to allow a special connector that would mate with Owen's space suit headphone/microphone connector so that he could plug into the MOONRAY package and make a few contacts with hams on Earth. He would then leave the package and continue on his routine assignments.

Numerous articles were published about Project MOONRAY and Amateur Radio enthusiasts world-wide were intrigued and very excited about the idea of having a repeater that could be accessed by hams world-wide as long as they had the moon on their side of the earth. Unfortunately, Congress cut off funding for NASA for any further lunar landings beyond APOLLO 17 and the MOONRAY Project was temporarily shelved.

Lunar exploration, Lunar habitats or colonies and numerous Lunar projects have recently again surfaced. No specific dates or schedules have yet been set, however, it is not too early to plan for Amateur participation in one (or more) future Moon visits as well as for other possible "out-of-this-world" concepts.

Further information or answers to questions about the status of this project may be obtained by writing:

PROJECT OSCAR  
P.O. BOX 1136  
LOS ALTOS, CA 94203-1136  
U.S.A.

[Info via Nick Marshall, W6OLO]

\* BALLOON SYMPOSIUM SCHEDULED \*

=====

Edge of Space Sciences is sponsoring a National Balloon Symposium on August 20, 21 & 22, 1993 in Denver, Colorado.

Subjects will include: Amateur Radio Applications, Basic Balloon Flight Procedures, FAA & FCC Regulations, Amateur Radio Applications, Balloon and Payload Systems, Applications to Education & Science, Student Participation Projects, Balloon Organization Development, and Payload Tracking & Recovery.

For more information contact Ted Cline, NØRQV, (303) 493-1136, ted\_cline@hpisla.lvld.hp.com, 3202 Spruce Drive, Fort Collins, CO 80526.

\* SpaceNews ON F0-20 \*

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My thanks to NØNBH and IK1SLD for volunteering to upload SpaceNews to the Fuji-OSCAR-20 mailbox.

\* THANKS! \*

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Thanks to all those who sent messages of appreciation regarding SpaceNews, especially:

IK1SLD	VK2FBI	ZR2ABT	N3GXP	KC4QZD	UA4LBQ
G6FWT	N6UVY	W6OLO	AL7KD	OE7FTJ	KØBJ NØNBH

\* FEEDBACK/INPUT WELCOMED \*

=====

Mail to SpaceNews should be directed to the editor (John, KD2BD) via any of the following paths:

FAX : 1-908-747-7107  
UUCP : ...catfish.ocpt.ccur.com!ka2qhd!kd2bd  
PACKET : KD2BD @ NN2Z.NJ.USA.NA  
INTERNET : kd2bd@ka2qhd.ocpt.ccur.com -or- kd2bd@amsat.org

MAIL : John A. Magliacane, KD2BD  
Department of Engineering and Technology  
Advanced Technology Center  
Brookdale Community College  
Lincroft, New Jersey 07738  
U.S.A.

<<= SpaceNews: The first amateur newsletter read in space! -=>>

/EX

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John A. Magliacane, KD2BD \* /\ \* Voice : 1-908-224-2948  
Advanced Technology Center |/\| Packet : KD2BD @ NN2Z.NJ.USA.NA  
Brookdale Community College |/\| Internet: kd2bd@ka2qhd.ocpt.ccur.com  
Lincroft, NJ 07738 \* \/\ \* Morse : -.- -.. ..--- -... -..

-----  
Date: 16 Jul 93 21:56:43 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: 10 ELECTRICAL COMMANDMENTS  
To: info-hams@ucsd.edu

I didn't write these ...

<forwards electrocuted>

### The Ten Commandments of Electrical Safety

I. Beware of the lightning that lurketh in an undischarged capacitor lest it cause thee to bounce upon thy buttocks in a most embarrassing manner.

II. Cause thou the switch that supplieth large quantities of juice to be opened and thusly tagged, that thy days may be long in this

earthly vale of tears.

III. Prove to thyself that all circuits that radiateth and upon which thou worketh are grounded and thusly tagged, lest they lift thee to a radio frequency potential and causeth thee to make like a radiator also.

IV. Tarry thou not amongst those fools that engage in intentional shocks, for they are not long for this world and are surely unbelievers.

V. Take care thou useth the proper method when thou takest the measures of high voltage circuits so that thou dost not incinerate both thee and thy test meter, for verily, though thou hast no stock number and can be easily surveyed, the test meter has one and as a consequence will bringeth much woe unto the supply officer.

VI. Take care thou tamperest not with interlocks and safety devices lest this incurreth the wrath of thy supervisor and bring the fury of the safety officer upon his head.

VII. Work thou not on energized equipment for if thou doest so thy shipmates will surely be buying beers for thy widow and consoling her in certain ways not generally acceptable to thee.

VIII. Verily, verily I say unto thee never service equipment alone for electrical cooking is a slow process and thou might sizzle in thy own fat upon a hot circuit for hour on end before thy maker sees fit to end thy misery and drag thee into his fold.

IX. Trifle thee not with radioactive tubes and like substances, lest thou commence to glow in the dark like a lightning bug and thy spouse be frustrated and have no further use for thee except for thy wages.

X. Thou shalt not make unauthorized modifications to equipment, but causeth instead to be recorded all technical directives and authorized modifications made by thee, lest thy successor tear his hair and go slowly mad in his attempt to decide what manner of creature hath made a nest in the wiring of such equipment.

Kevin Purcell N7WIM / G8UDP  
a-kevinp@microsoft.com  
Sit simplex, stulte!

-----

Date: Fri, 16 Jul 1993 19:58:34 GMT  
From: swrinde!cs.utexas.edu!math.ohio-state.edu!magnus.acs.ohio-state.edu!csn!  
teal.csn.org!rrw@network.UCSD.EDU  
Subject: Altrronics Phone?  
To: info-hams@ucsd.edu

Can someone drop me a note on altrronics phone number? I'm away from  
home and don't have access to any of my magazines/catalogs.

73's de WB5KXH

---Bob Wier  
wier@merlin.etsu.edu rrw@csn.org

THANKS!

~:

-----  
Date: Fri, 16 Jul 1993 19:48:14 GMT  
From: swrinde!cs.utexas.edu!usc!howland.reston.ans.net!ux1.cso.uiuc.edu!  
newsrelay.iastate.edu!news.iastate.edu!wjturner@network.UCSD.EDU  
Subject: ARES help in FLOOD zone???  
To: info-hams@ucsd.edu

In article <1993Jul16.123150.1@uwovax.uwo.ca> ppddgc@uwovax.uwo.ca writes:  
>Does anyone have any first hand knowledge of any Amateur Radio involvement  
>in the flooded parts of the US midwest? Our Red Cross is sending some  
>volunteers including some hams and any information would be of interest.

As I posted earlier when someone else asked, the hams in Des Moines, Iowa,  
are running a couple of nets. One is specifically to help direct Red Cross  
food trucks.

Will.

--  
Will Turner, N0RDV  
wjturner@iastate.edu | "Are you going to have any professionalism, |  
twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |  
TURNERW@vaxld.ameslab.gov

Date: Fri, 16 Jul 1993 15:39:30 GMT

From: sgi!odin!chuck.dallas.sgi.com!adams@ames.arpa  
Subject: CW continued.  
To: info-hams@ucsd.edu

In article <9307161027.AA20330@swmis>, P.Lucas@mail.nerc-swindon.ac.UK writes:

|>  
|> I wonder, are these 'fastest human CW-reader' contests done with random  
|> characters, or with plain text?  
|> Its generally accepted that, with plain language, satisfactory copy can  
|> be obtained if something like 40% of the information is never received;  
|> for example the letters 'TH' are almost always followed by 'E', and  
|> there are certain groups of letters that always occur together in plain text.  
|> (g and h for example).  
|> A true 'fastest human CW-reader' test would be performed using random  
|> characters , or, in a language unknown to the reader; anything else is  
|> more a test of the receiver's ability to deduce which letter comes next.  
|>  
|> As an aside, my mother was trained as a telegraphist at the end of WWII;  
|> she could listen to [machine generated] CW in one ear, and type at a mill,  
|> while simultaneously holding a phone conversation using the other ear. This  
|> really confused some people when she would start reading back the start  
|> of a message at the same time as she was copying the end of it...  
|>  
|> -Pete Lucas                    NERC Computer Services        Swindon        England  
|>                                pjml%swmis.nsw.ac.uk@nsfnet-relay.ac.uk        [Internet]  
|>    'Eat the World'            pjml@uk.ac.nsw.swmis                                [JANET]  
|>                                g6wbj@gb7sdn.gbr.eu                                [Packet]

Pete,

the contests are run with plain text. in fact, the world record was done with a newswire story or newspaper article. someone else from Australia pointed out that copy by McElroy was perfect at 70 wpm and he started missing at 75, so they gave him 72.5. this is not a typo on my part. i remember the value 72.5 from 25 years ago and thought that maybe i had exchanged them then. we'll have to do some research on this one. this is the reason why i believe libraries, book stores, etc. should never never throw away old books.

you're right, you can 'fill in the blanks' for text, but during these tests, immediately after the last critter is sent, the hardcopy is taken up as soon as the contestant finishes typing the last sentence. you don't have a chance to go back and fill in the missing critters. now, in order to go for the world record, you're going to have to coordinate with the ARRL and Guinness and probably several other organizations. geeeee! what a nightmare that'd be. at ARRL conventions, it'd be pretty easy to do.

i've heard of morse intercept operators for the government capable of sitting down and doing over 60 wpm for hours on end. that's just being a machine. you detach yourself from the text, since it is encrypted and nobody in their right mind would even attempt that stunt of decrypting. somebody would have you locked up for the wrong reasons there. ;-)

someone asked me yesterday about copying individual critters. i was scared to try it. reminds of the story of the centipede when asked how it could walk with all those legs and it rolled over in the gutter trying to think about it. but anyway, last nite i made up a tape with 1. random 5 letter code groups, 2. random calls and signal reports, 3. random words, and plain text at 45 to 50 wpm. on the way to work this morning, 30 min drive, i concentrated on copying individual letters and forcing myself not to think about the word. you know, it's not all that bad after all. i can't explain the process, just like the centipede trying explain how it walked. i can immediately recognize every critter before the next one comes along. i don't concentrate of dits and/or dahs. it just sounds and the letter appears in my mind. if i don't force myself to do the individual letters, i start hearing words on the plain text.

plain text is the easiest to do, of course. i relax and it just 'flows'.

my next test is to crank up the above to 80 wpm and see where it breaks. you realize that i just might go over the edge on this one guys/girls. if you don't hear from me on monday, i was killed in a car wreck on the way to work listening to high speed morse. then the bumper stickers will really pop out!!! don't do this while driving kids. the experiment in the car (pickup) gets complicated and distorted without earphones.

Derek, the Brit exiled to Austin, pointed out to me this morning that in the Low Band DXing book there is a hint to take stereo phones and change the phase on one ear to make sound seem like it's coming from inside the head. anyone out there in netland tried this? another point to look at this weekend. hey, this is only a hobby..... but what fun.

ciao,

--

"Be not too hard for life is short and nothing is given to man." - J. Baez

Chuck Adams, K5FO - CP60  
adams@sgi.com

-----  
Date: Fri, 16 Jul 1993 16:46:31 GMT



From: olivea!sgigate!odin!chuck.dallas.sgi.com!adams@decwrl.dec.com  
Subject: CW continued [long]  
To: info-hams@ucsd.edu

In article <1993Jul16.135031.883@cyphyn.UUCP>, randy@cyphyn.UUCP (Randy) writes:  
...my stuff deleted...

|>

|> I tried the point source test....I get the same result, but as I change the  
|> pitch, I have to move the 'phone to left or right ( depending) to find the  
|> null.

|> Interesting!

|>

|> Randy, KA1UNW

|>

Randy,

thank you, thank you, thank you. ;-)

do you realize we'll have to call this the Adams Effect, named after  
the discoverer!!! i wonder if any doctor, group of doctors, ear  
specialists or others have known about this. i outta get a Nobel  
Prize for this one.....

you'd think that with a pair of monophones you'd get the same effect,  
but you don't. this is gonna take somebody a 1,000,000 dollar research  
grant from the US Government to investigate.

ok, time stamp last years posting and this thread and put it in the  
record books.

Randy, i owe you lunch (under \$20) at the restaurant of choice.  
locally, not in Paris or Honolulu..... ;-)

let me know and i'll drop you a money order.

thanks,

p.s. what's your code speed Randy? could this be a cause or an effect?

--

"Be not too hard for life is short and nothing is given to man." - J. Baez

Chuck Adams, K5FO - CP60  
adams@sgi.com

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Date: Fri, 16 Jul 1993 16:25:10 GMT  
From: dog.ee.lbl.gov!overload.lbl.gov!agate!headwall.Stanford.EDU!Csli!  
paulf@network.UCSD.EDU  
Subject: IC-730 RF Problem  
To: info-hams@ucsd.edu

Sounds like you're getting RF into the supply regulation circuit. I have the same problem with my supply here and my TS-120s, since I'm about 20 ft from my antenna. The solution: Go to Radio Shack and buy some toroids, both the wrap around type (looks like a square ring) and one of the phone chord types (looks like a little cylinder). Wrap your DC line from the rig around the square toroid, and put the cylinder on the feedline where it enters the room. Things should improve quite a bit.

--

--Paul Flaherty, N9FZX | "The National Anthem has become The Whine."  
->paulf@Stanford.EDU | -- Charles Sykes, \_A Nation of Victims\_

-----

Date: 16 Jul 93 22:15:38 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: MPF102 direct replacement !!!!  
To: info-hams@ucsd.edu

George (SV3CHA) writes:

>Any idea for replacing the MPF102 FET for use in ARRL handbook(s) projects ?

I've been using the 2N5245 J-FET ( plastic TO-92 style case) for many years and have found it to be quite satisfactory in applications designated to use the MPF-102 device. The 2N5245 has a gm of 1000 at 400mhz, which I believe is higher than that of the MPF-102. Also, the 2N5245 is bipolar (symmetrical construction) in that it tolerates a polarity interchange between the source and drain terminals without a degradation in gain.

There are three devices in the family and any one should substitute well for the MPF-102: 2N5245, 2N5246 and 2N5247

Hugh Wells, W6WTU

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Date: 16 Jul 1993 14:23:00 -0500  
From: swrinde!cs.utexas.edu!gerald@cc.utexas.edu!emx.cc.utexas.edu!not-for-mail@network.UCSD.EDU  
Subject: People with funny ears  
To: info-hams@ucsd.edu

randy@cyphyn.UUCP (Randy) confirms:

>>adams@chuck.dallas.sgi.com (Charles Adams) writes:

>>: In article <CA82r2.HuI@srngenprp.sr.hp.com>, donrm@sr.hp.com (Don Montgomery) writes:

>>: ...stuff deleted...

:

>>: i posted this once before and i'm sure that everybody in the world thought

>>: i was/am crazy. take a small point source, say cheap earphone. you know

>>: the kind that you stick in your ear. put it two feet away in front of me.

>>: output steady tone. when the earphone is DIRECTLY in front of me, i.e.

>>: equal angle to both ears, the tone disappears. there seems to be a 180

>>: degree phasing (problem) between my right and left ear.

:

>I tried the point source test....I get the same result, but as I change the  
>pitch, I have to move the 'phone to left or right ( depending) to find the  
>null.

>Interesting! Randy, KA1UNW

Hmmmm, I tried this, but the only source I had was one of those thingies they put inside birthday cards that play "Happy Birthday" when you open the card - fairly pure tones but of course different pitches. I couldn't reproduce this effect, but then I can't copy CW at 60+ wpm either....

I do know that when I dropped said sounder (sounding happily away) in my very messy office, it took ages to find it - I eventually located it somewhere very different from where I thought the sound source was. So perhaps my ears are only Slightly Silly and that's why I can't do 60+ wpm.

Hey, wait! E'en as I was penning these words, I thought of another way. I set up my terminal to do a continuous (keyboard) beep, and waggled my head around in front of it. The sound definitely goes down in volume at one place, it doesn't quite disappear but almost. Wow, perhaps I can do 60+ now!

This has lots of interesting possibilities especially if, as Randy, says, the null point is different for different tones. It means that if you are listening to two closely-spaced CW signals via a loudspeaker, you can null one of them and still hear the other one by putting your head in the right place in front of the speaker. Gad, it's almost enough to make you want to listen to 40m DX phone signals, if you can remove the CW ones with this technique. It would be nice to do it the other way round!

Derek Wills (AA5BT, G3NMX)

Department of Astronomy, University of Texas,  
Austin TX 78712. (512-471-1392)  
oo7@astro.as.utexas.edu

-----  
Date: Fri, 16 Jul 1993 13:36:29 GMT  
From: agate!howland.reston.ans.net!usc!cs.utexas.edu!csc.ti.com!tilde.csc.ti.com!  
m2.dseg.ti.com!ernest!cmptrc!mitch@ames.arpa  
Subject: qrp...  
To: info-hams@ucsd.edu

I'm looking for some net wisdom. Now that my code speed is starting to come back up I'm debating on going qrp for my cw work. (a lot less rfi problems than my borrowed hw101 /grin). I'm looking for thoughts on the subject as well as some ideas on decent, affordable cw qrp radios. I've been reading the adds for the MFJ radios and they look pretty good for the price I can get one locally for. Any ideas? Hints?

Thanks!  
Mitcheal  
KA5SOI  
(tech+ upgrading to general and beyond!)

-----  
Date: 16 Jul 1993 16:05:21 GMT  
From: newsstand.cit.cornell.edu!newsstand.cit.cornell.edu!usenet@cu-  
arpa.cs.cornell.edu  
Subject: SSTV video source/manipulation questions  
To: info-hams@ucsd.edu

New Mode time - I don't know about you all, but every once in a while I get the itch to try a new mode, and with the recent flurry of PC solutions to doing slow scan tv, I fell victim and got a Pasokon board for my PC. Lots of fun watching the pictures go by on 14.230 - but now I want to send some.

I could grab some generic G-rated GIF's and send them, but I'm much more interested in getting some 'real' pictures into the system. I'm fairly well equipped with video equipment from playing with ATV, but I don't have a PC based video capture board (nor will the budget support one unless it's really cheap), nor do I know much about what software can be used to manipulate the images (doing things like overlaying my call, etc)

I \*do\* have a Quadra 700 Macintosh at work equipped with a VideoSpigot card that can do video capture using ScreenPlay - but the file types aren't directly compatible. I've used GIFconverter, but don't get very

good results (and the SSTV software would really rather see Targa .TGA files anyway) - the images are rather dark and muddy and the colors seem to be off. Usable, but barely.

What I want is some net wisdom on

a) Where to get a good program to take 24 bit video images from the mac and make them into .TGA files for the pc. I can do the disk conversion using Apple File exchange, but need an FTP site with something to massage the data into the .TGA format (or .PCX or .GIF).

b) An FTP site with a program to go in and paint over the video file after it's been made into a .TGA (or .PCX or .GIF) file.

c) if there aren't public programs for doing either or both of those, pointers to reasonably priced commercial programs.

d) information on video capture cards for the PC. (even if I could afford one right now, I don't know what ones are worth looking at or have good software - eventually I'll want one at home)

e) pointers towards any particularly good ftp sites or newgroups for this kind of stuff.

Thanks in advance

Kevin, WB2EMS - (fkf1@cornell.edu)

-----  
Date: Fri, 16 Jul 93 14:18:14 GMT  
From: mercury.hsi.com!a3bee2!cyphyn!randy@uunet.uu.net  
Subject: Teletype question  
To: info-hams@ucsd.edu

jka@mustang.ece.cmu.edu (Jay Keith Adams) writes:

:  
: I recently became the proud owner of a real honest-to-god  
: Teletype(TM). Two questions:  
:  
: 1. The ribbon is pretty dry. Is there some way to re-ink it? Do I  
: have a prayer of finding Teletype ribbons.  
:  
: 2. How do I get this monster to talk to my modem or TNC (electricly,  
: that is). It has an RS-232 (DB25) connector, but my friend tells  
: me that these things use current-loop (?) instead of voltage-level  
: signals. Anyone know what he's talking about?  
:

: Thanks a lot for any help.  
:  
: - Jay, KE3AT

If the ribbon looks to be in good shape...no holes or worn spots...you might get a bottle of ink that is used to re liven a rubber stamp pad.  
But before you do,try it first.  
Also, you might be able to buy a spool of ribbon like for an Underwood or an Olivetti...wind it on to the TTY's spool

YES they use a "current loop" of 20 or 60 ma, as supplied by about 45-100v dc, thru a resistor. Resistor value calculated out to give that current.

( so if using 25 vac in a volt doubler ckt...getting about 70 v you want roughly 3500 ohms for 20ma...1000 ohms for 60 ma )

To then connect this to modern equip, get a Horizontal output transistor whos ratings exceed 400v Vceo Vvbo , 600ma and 30-50W diss.

wire its collector to the magnets in the TTY and the resistor from the remaining wire on the magnets, to the +70v dc  
common up the "-" to grond as well as the emitter of the transistor.

Connect transistors base to 470 ohms to gnd ( emitter) and ....

Well, here is what I did,and ON ham bands I did pick up 1-2 qsos...  
( you wont, out side ham bands...they use scrambled code)

Run speaker leads direct to base and emitter...or via 100 ohms if radio has a lot of audio output.

Tune in a TTY station...bfo on, and tune so you zerobeat one of the tones leaving just the one left.

turn vol up until machine starts doing stuff.

If it comes out all martian, re-tune to zerobeat that tone and get the one you zeroed before to be heard.

be carful to not adj vol too high or you'll ruin copy...or that transistor if no 100 ohm resistor there.

IF they are sending at the baud rate your machine runs at, ( 64 and 100 I think) then you will get copy....it'll be on one side or other of zerobeat.

If they are sending at a baud rate other than your machines speed, you'd have change the gears ( yes...change the gears ), which is rather involved...

DO NOT try to adjust the speed regulator! The numbers on it are only 'relative'...you'd not be able to go from 64 to 100 baud doing that.

The above hook-up is xx crude but will let you check/see if it works and

to let you decide if or not to go further.

You can reuse that transistor in the REAL decoder ( uses ne567s and a 'latch' IC then a 741 ... etc) so after the test, you wont be wasting it.

Good luck, have fun

73

Randy, KA1UNW

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End of Info-Hams Digest V93 #867

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